American Osteopathic College of Occupational and Preventive Medicine

Basic Course in Occupational Medicine, Part II

Sunday, October 7, 2012

Heather Gjorgjievski, DO and P. Lance Walker, DO, MPH
Program Co-Chairs

Basic Course Lecture Handouts

A. 7:30 am Overview of the CAQ in Occupational and Environmental Medicine, Heather Gjorgjievski, DO
B. 8:00 am Infectious Disease & Biological Hazards, Charles Werntz, DO, MPH, FAOCOPM
C. 9:15 am Occupational Metals, P. Lance Walker, DO, MPH
D. 10:30 am ADA and Regulatory Issues, Charles Werntz, DO, MPH, FAOCOPM
E. 11:45 am Physical Hazards, Elizabeth P. Clark, DO, MPH&TM, FAOCOPM
F. 1:00 pm Plastics and Pesticides, Mike Carson, DO, MPH
G. 2:15 pm Occupational Dermatology, Elizabeth P. Clark, DO, MPH&TM, FAOCOPM
H. 3:15 pm Solvents and Organics, Vikas Kapil, DO, MPH, FACOEM
I. 4:30 pm Conclusions, Questions and Answers, Posttest, P. Lance Walker, DO, MPH
5:00 Adjourn

Grievance Procedure

Please let Jeffrey LeBoeuf, CAE or one of the AOCOPM Officers know immediately if you have any problems with facilities, hand-outs, program content, or any other issue with this conference. Concerns about the CME program's compliance with the AOA "Uniform Guidelines" may be expressed to the accredited sponsor—American Osteopathic College of Occupational and Preventive Medicine (AOCOPM) during the conference or after by calling AOCOPM at (800) 558-8686. Copies of these guidelines are available upon request. Unresolved issues regarding compliance with the AOA "Uniform Guidelines" can be brought to the attention of the AOA Division of CME. They can be contacted at (800) 621-1773 x 8053 or (312) 202-8053 or via mail at 142 East Ontario Street; Chicago, IL 60611-2864.

About the CAQ

The Certificate of Added Qualifications (CAQ) in Occupational/ Environmental Medicine represents credentialing in the field of medicine. The CAQ is approved by the American Osteopathic Association (AOA) through established criteria and a written exam administered by the American Osteopathic Board of Preventive Medicine (AOBPM).

The AOBPM is the AOA-approved examining entity, which administers exams for:
(1) Full Board certification in occupational/environmental medicine, aerospace medicine, and public health/general preventive medicine for the osteopathic profession.

(2) A Certificate of Added Qualification (CAQ) in occupational/environmental medicine.

The AOCOPM CME Conferences offer didactics designed to provide the most up-to-date information for doctors who practice in occupational/environmental medicine, disability/impairment evaluations, public health/general preventive medicine, and aerospace medicine.

In addition, the College sponsor a basic course in occupational and environmental medicine designed to provide a basic understanding and expertise in the areas of occupational and environmental medicine while preparing participants to take a written examination qualifying for an AOA-approved, Certificate of Added Qualification (CAQ).

The Course is presented in three (3) parts; physicians *do not* need to take the parts in sequence. For the convenience of the faculty and participants, one part is provided at each of the two (2) conferences presented by the AOCOPM each year (usually in March and October). Each part is a full day didactic program, requires separate registration to the AOCOPM, and provides seven to nine (7 - 9) hours of 1-A CME credits (Attendance at the AOCOPM conferences in the spring and fall will provide a total of approximately fifty (50) hours of AOA Category 1 CME credits each year).

Study Text: It is suggested that study include such volumes as: "The National Medical Series for Independent Study of Preventive Medicine and Public Health," by Brett J. Cassens, Harvard Publishing; "Occupational and Environmental Medicine," 2nd Edition, Lange Series, by Joseph LaDou; "A Practical Approach to Occupational and Environmental Medicine," 2nd Edition, by Robert J. McCunney, Little, Brown and Company, and "Occupational Medicine" the 3rd Edition by Carl Zenz.

AOCOPM Membership

Membership: For information on membership in the American Osteopathic College of Occupational & Preventive Medicine, please call 800-558-8686 or email jeffrey@aocopm.org. Please visit www.aocopm.org for further information or to see about future conferences.

Eligibility Requirements

- Must be Board Certified by the AOA in an AOA- approved primary certification;
- Hold a valid, unrestricted license to practice medicine in a state or territory of the United States or a province of Canada;
- Show evidence of completion of a basic review course comparable to the one provided through the AOCOPM or document an initial 100 hours of postgraduate training within the past five (5) years in the area of special interest. At a minimum, 50 hours must be in Category 1 and 50 hours in Category II.
- Submit practice documents verifying current practice in area of special interest (i.e., letters of agreement from companies, schools, hospitals and/or clinics contracted with or performing service for).
- Submit two (2) letters of recommendations from persons competent in the area of special interest.
- Submit the required application, fees, and supporting documents to the Executive Secretary of the AOBPM by January 1 prior to sitting for the CAQ examination.
- Pass appropriate examination designed to evaluate applicant's understanding of the scientific bases of the problems involved in the field of interest and demonstrate current knowledge, sound judgment and a high degree of skill. An oral interview and a written multiple choice examination will be personally conducted, supervised and reviewed by members of the AOBPM.

The application to take the CAQ exam must be obtained from the Executive Secretary of the AOBPM - not from the College. You may contact the AOBPM Executive Secretary:

Michael Shelden, D.O, MPH
Executive Secretary
American Osteopathic Board of Preventive Medicine
142 East Ontario Street, Floor 4
Chicago, Illinois 60611
Phone 800-621-1773, Ext 8103 - Fax 312-202-8224
email aobpm@osteopathic.org
web page http://www.aobpm.org

The Certificate of Added Qualification (CAQ) is valid from the date of issuance, provided a minimum of 50 hours of Category 1-A in occupational / environmental / preventive medicine is documented every three years.

To prepare for the CAQ examination, it is recommended that in addition to completing a basic review course in occupational medicine, the applicant contact the AOBPM for a list of study materials.

The AOCOPM presents a three-part basic course designed to educate primary care physicians to deal with occupational and environmental medicine issues as they occur in the course of their practices and to assist in the preparation for the CAQ exam.

For more information on the basic course, contact the AOCOPM at 800.558.8686 or e-mail to: jeffrey@aocopm.org.

Michael Carson, DO, MPH, FACPM

Dr. Michael Carson is the Global Director for Health Services Consulting for The Dow Chemical Company, responsible for leading the medical support to Dow in product safety, business development, external advocacy, government affairs, medical outreach, and issue management. In addition, he leads Dow's Epidemiology department for human health research.

During his 23 years with Dow, Dr. Carson has participated in and published numerous studies assessing Dow employee health in Ohio, Texas, California, and Michigan, and several clinical trials of product health and safety impacts. Dr. Carson has also served as Dow's health focal point regarding dioxin since 1997.

Prior to his current responsibilities, Dr. Carson served as an Occupational Health Physician and Regional Medical Director for Dow in numerous regions, including California, Texas, and Midland, MI, from 1989 to 2011. He has been in clinical medical practice for over 20 years, including a Family Medicine practice in Michigan prior to working in Dow.

After graduating with a Bachelor of Science (BS) from Duke University, Dr. Carson earned his D.O. degree from Michigan State University. He completed his residency in Family Practice with Saginaw Cooperative Hospitals from 1978-1980. Dr. Carson obtained a Masters in Public Health (MPH) in Occupational Medicine from the University of Michigan in 1991.

Dr. Carson is a Diplomate with the American Board of Family Practice, a Diplomate with the American Board of Preventive Medicine in Occupational and Environmental Medicine, and a Fellow of the American College of Preventive Medicine.

Elizabeth Clark, DO, MPH&TM, FAOCOPM

Dr. Elizabeth Clark recently retired from the USAF where she was COL, MC, CFS, and Chief, International Education &Training Division. She is currently employed in New Braunfels, TX in a weight loss and cosmetic clinic.

Dr. Clark earned her medical degree at the University of Health Sciences, Kansas City followed by the MPH & TM from Tulane's School of Public Health and Tropical Medicine. She completed Flexible Internship at Orlando General Hospital and her residency in Aerospace and Preventive Medicine through the USAFSAM program.

Dr. Clark is board certified by AOBPM in Aerospace Medicine, Occupational Medicine, and Preventive Medicine, by AOBFP in Family Practice, and holds a Certificate of Additional Knowledge in Tropical and Travel Medicine. She is a fellow of the college and of the Academy of International Medical Acupuncture.

Vikas Kapil, DO, MPH, FACOEM

Dr. Kapil is Chief Medical Officer and Associate Director for Science at the National Center for Environmental Health and the Agency for Toxic Substances and Disease Registry at the Centers for Disease Control and Prevention in Atlanta, Georgia.

He received his D.O. at the Michigan State University College of Osteopathic Medicine in East Lansing, Michigan and a Masters in Public Health (M.P.H.) from The University of Michigan. He completed residency training in Emergency Medicine at POH Medical Center in Pontiac, Michigan and in Occupational and Environmental Medicine at the University of Michigan Medical Center in Ann Arbor, Michigan.

He is Board Certified in Emergency Medicine and in Occupational Medicine. Dr. Kapil is a Fellow of the American College of Occupational and Environmental Medicine and Associate Professor of Environmental Health at the University of Cincinnati Medical Center in Cincinnati, Ohio. His primary areas of clinical and research interest include environmental emergencies, environmental exposures in communities, mass casualty events preparedness and response, and non-communicable disease and injury in low income countries.

P. Lance Walker, DO, MPH

Dr. Walker is currently a partner in SiteMed North America, LLC, which provides on-site occupational medical services to industry. He is the Associate Medical Director of Georgia Power Corporation. He is also a partner in PointMed, Inc.,which provides MRO and IME services.

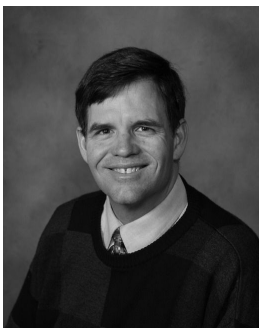
Dr. Walker completed undergraduate training in Biology at William Jewell College in Liberty, Missouri. He received a Doctorate Degree in Osteopathic Medicine from the Oklahoma State University College of Osteopathic Medicine. His residency was completed in Family Medicine at Floyd Medical Center in Rome, Georgia where he served as Chief Resident.

After residency he entered private practice in North Carolina where he co-founded and managed three successful practices in the Raleigh-Durham area. He received a Masters Degree in Public Health from the University of North Carolina in 2005. Dr. Walker relocated to the Atlanta area to be closer to family in 2006. He is board certified in Family and Osteopathic Medicine. He is an Aviation Medical Examiner and a Certified Medical Review Officer.

His practice interests include wellness and occupational medicine. His treatment philosophy is to emphasize disease prevention through early intervention and lifestyle modification before utilization of pharmacologic interventions.

Dr. Walker is married, has two young children and resides in Kennesaw, Georgia. His personal interests include running, reading and travel.

Charles Livingston Werntz, III, DO, MPH, FACOEM



Dr. Carl Werntz currently serves as An Associate Professor of West Virginia University and is the Program Director of the Osteopathic Occupational Medicine Residency program in Morgantown West Virginia. Dr. Werntz is a 1996 graduate of the Kirksville College of Osteopathic Medicine and received his Master's of Public Health from West Virginia University in 2002. He completed his Residency in Occupational Medicine at the West Virginia University in 2002. Dr. Werntz has provided numerous professional lectures throughout his career. He is a fellow of the American College of Occupational and Environmental Medicine.

Basic Course in Occupational and Environmental Medicine

Needs Assessment

The American Osteopathic Board of Preventive Medicine provides the most recent Table of Specificity for the Occupational Medicine – Certificate of Added Qualification (CAQ) Examination. This provides the core of our needs assessment. Based upon this table of specificity the lectures were chosen and learning objectives developed.

Domain Distribution
Epidemiology and Statistics 3%
Acute Disease Prevention 12%
Chronic Disease Prevention 5%
Impairment and Disability Evaluation 5%
Toxicology 15%
Injury Prevention 7%
Mental Health and Retardation 2%
Industrial Hygiene and Safety 16%
Substance Abuse 2%
Clinical Occupational and Environmental Medicine 13%
Legal and Regulatory Requirements 10%
Physical Hazards 5%
Biological Hazards 3%
Reproductive Hazards 2%

Total 100%

Learning Objectives

Part I

A. Overview

At the end of the presentation the attendee will be able to:

- Introduce participants to the College, the CAQ and the Board of Preventive Medicine
- Preview the Basic Course in Occupational and Preventive Medicine
- Discuss Occupational Medicine as a Career
- Provide a pre-test to participants

B. Introduction to Occupational Medicine

At the end of this lecture, the student will be able to:

- Understand the scope and practice of OM
- Name 2 historical OM figures
- Identify significant laws
- Name one major preventive health initiative in which OM plays an important role
- Enumerate OM services delivery methods
- Explain the essential and elective components of an OM practice

C. Ergonomics

At the end of this lecture, the student will be able to:

- Define Ergonomics & Work Related Musculoskeletal Disorder
- Identify the Elements of an Ergonomics Process
- Explain Ergonomic Risk Factors
- Describe Causation issues
- Outline Intervention Strategies

D. Medical Surveillance

At the end of the presentation the attendee will be able to:

- Define Medical Surveillance
- Discuss the purpose of Medical Surveillance
- Describe the phases of a Medical Surveillance Program
- Identify and understand the significance of Occupational Sentinel Health Events
- Recognize the distinction between well-established Medical Surveillance protocols and nascent protocols for new substances

E. Biostatistics and Epidemiology

At the end of this lecture, the student will be able to:

- Define Epidemiology and how it explains disease patterns.
- Explain the differences between epidemiology and clinical medicine.
- Identify the types of epidemiologic studies.
- Describe the measures of association between a factor and an outcome.

F. Occupational Safety & Health Regulations

At the end of this lecture, the student will be able to:

- Evaluate the impact that various governmental and private sector organizations have upon employers in their management of environmental issues.
- Determine the degree to which a broad range of occupational health laws and regulations directly impact clinical practice in occupational medicine
- Apply new changes to existing laws which affect occupational medicine practice
- Implement an effective clinical program in the Worker Compensation environment
- Employ the use of the internet as a valuable resource in the practice of occupational medicine

G. Clinical Toxicology

At the end of this lecture, the student will be able to:

- Understand the definition of TOX
- Identify Various Aspects of Chemical Exposure
- Identify methods, common applications of TOX in Chemical induced illness
- Understand the routes and degree of exposure, absorption and metabolism
- Understand Exposure - Dose Response Relationship, Duration, Frequency, Distribution, affect on Target Organ, Metabolism and Routes of Excretion

H. Facility Walk-Though Survey

At the end of this lecture, the student will be able to:

- Develop a strategy for conducting a workplace walk-through survey.
- Organize a format for recording essential observations.
- Consider unique characteristics of various industries in evaluating worksites.
- Consider applicable governmental regulations in their assessments.
- Effectively utilize information resources.

Part II

A. Overview

At the end of the presentation the attendee will be able to:

- Introduce participants to the College, the CAQ and the Board of Preventive Medicine
- Preview the Basic Course in Occupational and Preventive Medicine
- Discuss Occupational Medicine as a Career
- Provide a pre-test to participants

B. Occupational Metals

At the end of the presentation the attendee will be able to:

- Discuss the physical and chemical properties of common occupational metals
- Identify common objects containing occupational metals
- Identify risks and methods of absorption and exposure
- Discuss illnesses and injuries caused by metallic exposure
- Learn proper evaluation and management of exposure cases
- Identify preventive measures

C. Occupational Dermatology

At the end of the presentation the attendee will be able to:

- Review medical definitions and terminology to describe Occupational Dermatoses
- Better understand the epidemiology and economic impact of Occupational Dermatology
- Review proper skin examination to effectively assess Occupational Dermatoses
- Review effective history taking techniques to effectively diagnose Occupational Dermatoses
- Review common clinical morphologic patterns of Occupational Skin Disease and their etiology
- Review Occupational Skin disorder prevention strategies

D. ADA Regulatory Issues

At the end of the presentation the attendee will be able to:

- Become familiar with a major law which dramatically impacts the practice of Occupational Medicine.
- Determine which individuals have protection under the ADA.
- Understand the meaning of “qualified individual with a disability.”
- Determine who are “exempted employers”
- Understand the role of medical examinations, drug testing and return to work evaluations.
- Determine what is “reasonable accommodation”

E. Physical Hazards

At the end of the presentation the attendee will be able to:

- Describe the various types of physical hazards associated with occupational exposures.
- Describe the health effects associated with those hazards.
- Describe the appropriate prevention measures to minimize health effects from physical hazards.

F. Infectious Disease/Biological Hazards

At the end of the presentation the attendee will be able to:

- Identify potential biologic hazards commonly encountered in occupational settings.
- Identify protective strategies that are available.
- Identify the relevant legal/regulatory controls
- Review the Bloodborne Pathogens Standard (OSHA)
- Review guidance on preparing workplaces for an Influenza Pandemic (OSHA)

G. Solvents and Organics

At the end of the presentation the attendee will be able to:

- Provide an overview of the toxic effects of organic solvents.
- Examine the range of toxicities and the target organs.
- Review the basic chemical structures of the categories of organic solvents.
- Identify the common organic solvents and their metabolites.
- Understand the principles of prevention of toxicity.

H. Plastics & Pesticides

Regarding Plastics, at the end of the presentation the attendee will be able to:

- Identify the major plastics.
- Basic understanding of toxicities.
- Learn to recognize exposure opportunities.
- Develop knowledge of specialized tests.
- Gain an appreciation of the deficiency in current scientific data.

Regarding Pesticides, At the end of the presentation the attendee will be able to:

- Become familiar with the importance of these compounds
- Understand the common routes of exposure
- Learn to recognize the common clinical symptoms and signs
- Understand the implications for treatment of toxicities
- Develop strategies for prevention and surveillance

PART III

A. Overview

At the end of the presentation the attendee will be able to:

- Introduce participants to the College, the CAQ and the Board of Preventive Medicine
- Preview the Basic Course in Occupational and Preventive Medicine
- Discuss Occupational Medicine as a Career
- Provide a pre-test to participants

B. Noise Induced Hearing Loss

At the end of the presentation the attendee will be able to:

- Discuss the costs of hearing loss
- Describe the basics of hearing
- Identify the Types of hearing loss
- Develop the essentials of a good hearing conservation program
    - Noise Monitoring
    - Periodic Audiometric evaluation
    - Engineering Controls
    - Worker Education
    - Selection of appropriate HPDs
    - Administrative Controls

C. Occupational Cancer Risk

At the end of the presentation the attendee will be able to:

- Discuss potential causes of occupational related cancers
- Discuss estimates of rates of occupational exposures causing human cancers
- Identify the Initiation, Promotion, and Progression of occupational related cancers

D. Psychiatric Aspects of Occupational Medicine

At the end of the presentation the attendee will be able to:

- Relate the biopsychosocial model of psychiatric disease to occupational medicine.
- Discuss the epidemiological implications of the work environment, industrial organization, and cultural relationships.
- Examine the spectrum of occupational psychiatric disease
- Identify areas of controversy in occupational psychiatric disorders
- Offer relevant management/treatment strategies

E. Ionizing and Non-Ionizing Radiation

At the end of the presentation the attendee will be able to:

- Apply epidemiological principles in the approach to assessing exposures to radiation.
- Understand the concepts & definitions of various types of ionizing radiation (IR) and non-ionizing radiation (NIR) and distinguish the differences between the various types of exposure.
- Diagnose the biologic effects of IR in man.
- Diagnose the biologic effects of NIR in man.
- Utilize therapeutics strategies for radiation exposures

F. Disability/Impairment Evaluations

At the end of the presentation the attendee will be able to:

- Compare and contrast three types of disability or income replacement programs
- Review the Physician's role in the disability process
- Effectively participate in the three different programs
- Appropriately utilize Independent Medical Examiner (IME)
- Recognize the characteristics of a good IME

G. Reproductive Issues in the Workplace

At the end of the presentation the attendee will be able to:

- Be able to cite some important court decisions regarding reproductive health issues in the workplace
- Be able to describe the difference between reproductive hazards and teratogens
- Be able to describe background rates of infertility and sub-fertility, miscarriage and stillbirths, birth defects, low birth weight and premature birth, developmental disorders, and childhood cancers
- Be able to list some suspected reproductive hazards and the suspected consequences of their exposures
- Be able to describe some prevention strategies to minimize exposure to workplace reproductive hazards

H. Occupational Pulmonary Disorders

At the end of the presentation the attendee will be able to:

- Define key terms, phrases and exposures relevant to Occupational induced Pulmonary disorders
- Discuss the health impact and the major causes of morbidity and mortality due to Cardiopulmonary Occupational diseases
- Describe the features of Cardiopulmonary diseases: burden of illness, risk factors/etiology, prevention strategies
- Discuss the key components of an occupation evaluation and demonstrate the ability to utilize screening, diagnostic and monitoring modalities

I. Occupational Cardiovascular Disorders

At the end of the presentation the attendee will be able to:

- Define key terms, phrases and exposures relevant to occupational induced Cardiovascular disorders
- Discuss the health impact and the major causes of morbidity and mortality due to Cardiovascular occupational diseases
- Describe the features of Cardiovascular diseases: burden of illness, risk factors/etiology, prevention strategies
- Discuss the key components of an occupation evaluation and demonstrate the ability to utilize screening, diagnostic and monitoring modalities

Evidence Basis:

Core References

1. A Practical Approach to Occupational and Environmental Medicine. Robert J. McCunney; Third Edition, 2003, 952 pg, Lippincott Williams and Wilkins. Includes NIOSH CD-ROM Pocket Guide to Chemical Hazards.
2. Current Occupational & Environmental Medicine. Joseph LaDou; Fourth Edition, 2007, 846 pg, McGraw-Hill Companies Inc.
3. Textbook of Clinical Occupational and Environmental Medicine. Rosenstock, Cullen, Brodkin, Redlich; Second Edition, 2005, 1328 pg, Saunders.

Recommended Supplemental Resources:

1. Instant Medical Surveillance: The Evaluation of Biological and Chemical Dangers, Frank Mitchell, DO, MPH; 2nd Edition 2007, 424 pg, OEM Press.
2. Occupational Medicine Board Essentials. Les Folio; Second Edition, 2002, 100 pg, WordBytes Publications. $30.00. Available at the AOCOPM webstore, www.aocopm.org
3. Preventive Medicine Board Essentials. Folio, Yao, Clark; Second Edition, 2003, 100 pg, WordBytes Publications. $30.00. Available at the AOCOPM webstore, www.aocopm.org
4. AOCOPM Basic Course Review CD. $45. Available at the AOCOPM webstore, www.aocopm.org

Other Resources

1. Environmental and Occupational Medicine, 4th Edition, 2006. William N Rom, 1904 Pages. Lippincott, Williams & Wilkins
2. The Workplace Walk-Through. James P. Kornberg, MD, ScD; 1992, 165 pg, Lewis Publishers
3. Guide to the Medical Evaluation of Respirator Use. Robert McLellan, Kathleen Schusler; 2000, 324 pg, OEM Press.
4. Clinical Environmental Health and Toxic Exposures. John B. Sullivan, Jr, MD, Gary R. Krieger, MD, MPH; Second Edition, 2001, 1344 pg, Lippincott Williams and Wilkins.
5. Occupational Medicine Practice Guidelines: Evaluation and Management of Common Health Problems and Functional Recovery in Workers. American College of Occupational and Environmental Medicine; 3rd Edition, 2009, 3500 pgs, ACOEM.
6. The DOT Medical Examination. Natalie Hartenbaum, MD, MPH; 2008, 4th Edition, 275 pg, OEM Press.
7. Reproductive Hazards in the Workplace. Linda Frazier, MD, MPH, Marvin Hage, MD; 1998, 600 pg, John Wiley & Sons, Inc.
8. Chronic Musculoskeletal Injuries in the Workplace. Don Ranney; 1997, 352 pg, W. B. Saunders Co.

Periodicals

1. Journal of Occupational and Environmental Medicine: American College of Occupational and Environmental Medicine, http://www.joem.org , (847) 818-1800; monthly.

Other Study Aids

1. Occupational Medicine Secrets. Rosemary Bowler, Ph.D., MPH, James Cone, MD, MPH; 1999, 353 pg, Hanley & Belfus, Available from OEM Press.
2. Clinical Occupational and Environmental Medicine: a Pretest and Self-Assessment Guide. Renata Bluhm; 2000, 101 pg, OEM Press.

Major Suppliers of Occupational Medicine Texts

AOCOPM Website, **www.aocopm.org** Click on "AOCOPM Store"

Elsevier is a parent company for numerous publishers of core and subspecialty texts in occupational and environmental medicine, as well as the **Clinics** series of periodicals in many specialty areas. Publishers found at the Elsevier website include Saunders, Mosby, Churchill Livingstone, Butterworth-Heinemann, and Hanley-Belfus. http://us.elsevierhealth.com , (800) 545-2522

Lippincott, Wilkins and Williams is a unit of Wolters Kluwer Health, a group of leading information companies offering specialized publications and software for physicians, nurses, students and specialized clinicians. Products include drug guides, medical journals, nursing journals, medical textbooks and medical pda software. www.LWW.com (800) 638-3030

OEM Press publishes a catalog for many occupational and environmental medicine subspecialty texts. www.oempress.com , (800) 533-8046.

Occupational Medicine Websites and Phone Numbers:

Occupational Medicine

1. American Osteopathic College of Occupational and Preventive Medicine (AOCOPM) www.aocopm.org
2. American College of Occupational and Environmental Medicine (ACOEM) www.acoem.org
3. NIOSH: 1-800-35-NIOSH www.cdc.gov/niosh/homepage.html
4. Chemical Protective Clothing http://www.cdc.gov//niosh/docs/87-108/
5. American Society for Testing and Materials (ASTM) http://www.astm.org/
6. National Fire Protection Association http://www.nfpa.org
7. University of Vermont MSDS Collection http://hazard.com; http://siri.uvm.edu/msds
8. Equal Employment Opportunity Commission; www.eeoc.gov
9. Mine Safety and Health Administration; www.msha.gov
10. Food and Drug Adminstration; www.fda.gov
11. Substance Abuse and Mental Health Services Administration; www.samhsa.gov

12. Regional Poison Control (800) 222-1222
13. Environmental Protection Agency – Indoor Air Quality; www.epa.gov/iaq
14. National Agriculture Safety Database; www.cdc.gov/nasd
15. Advanced OSHA Search; www.osha.gov/pls/oshaweb/owasrch.full_site_search
16. Americans with Disabilities Act; http://janweb.icdi.wvu.edu/
17. Code of Federal Regulations; www.dol.gov/esa/regs/cfr/main.htm
18. NIOSH homepage; www.cdc.gov/niosh/homepage.html
19. Haz Map: Information Hazardous Chemicals and Occupational Disease; http://hazmap.nlm.nih.gov/
20. NIOSH Elements of Ergonomic Program; www.cdc.gov/niosh/ephome2.html
21. Frequently cited OSHA Standards; www.osha.gov/pls/imis/citedstandard.html
22. OSHA Respiratory Advisor Page; www.osha.gov/SLTC/etools/respiratory/contents.html
23. OSHA Compliance etools page; www.osha.gov/SLTC/etooldownloads/downloads.html
24. OSHA Fact Sheets; www.safetyinfocur.com/OSHAfactindex.html
25. American Association of Medical Review Officers; www.aamro.com/
26. Department of Transportation; www.dot.gov
27. Federal Motor Carrier Safety Administration; www.fmcsa.dot.gov/

Hazardous Substances Databases

1. ATSDR (Agency for Toxic Substances and Disease Registry) toxicological Profiles; www.atsdr.cdc.gov/
2. TOXNET databases; http://toxnet.nlm.nih.gov
    a. HSDB (Hazardous Substance Data Bank
    b. IRIS (Integrated Risk Information System)
    c. ITER (International Toxicity Estimate for Risk)
    d. Gene-Tox (Genetic Toxicology)
    e. CCRIS (Chemical Carcinogenic Research Information System)
    f. Toxline (Toxicology Bibliographic Information)
    g. DART/ETIC (Developmental and Reproductive Toxicology)
    h. Chem ID Plus (Chemical Synonyms and Structures)
    i. TRI (Toxic Release Inventory)
3. Registry of Toxic Effects of Chemical Substances (RTECS); www.cdc.gov/niosh/rtecs/default.html
4. Toxic Release Inventory; www.epa.gov/tri/
5. Toxicology, Occupational Medicine, and Environmental Series (TOMES) Plus System; www.micromedex.com/products/tomesplus/
6. Biennial Reporting System (BRS) for large quantity generators; www.epa.gov
7. Comprehensive, Environmental Response, Compensation, and Liability Inventory System (CERCLIS); www.epa.gov
8. Nuclear Reactor List; www.nrc.gov
9. Hazardous Substance Release Effects Database (HazDat); www.atsdr.cdc.gov
10. NTP (National Toxicology Program); http://ntp-server.niehs.nih.gov/
11. CHEMTREC HazMat Communication Center (800) 424-9300; www.chemtrec.org
12. National Pesticide Information Center; http://npic.orst.edu/
13. National Pesticide Telecommunications Network: 1-800-858-7377/7378

Literature Search Databases and Library Resources

1. Medline via PubMed; www.ncbi.nlm.nih.gov/entrez/query.fcgi
2. PubMed; www.pubmedcentral.nih.gov

3. UC at Berkeley Toxicology and Occupational Medicine; www.lib.berkeley.edu/PUBL/tox.html
4. National Libraries of Medicine Homepage; www.nlm.nih.gov
5. Free Medical Journals; www.freemedicaljournals.com
6. CDC Wonder: Public Health Databases; http://wonder.cdc.gov/
7. Bureau of Labor Statistics homepage; http://stats.bls.gov/

Reproductive Toxicity Databases

1. Organization of Teratology Information Services (OTIS); http://www.otispregnancy.org/
2. Reproductive Toxicology Center (REPROTOX); www.reprotox.org/
3. REPRORISK and TERIS (fee based); www.micromedex.com/products/reprorisk/

Preventive Medicine

1. Poison Control; www.aapcc.org/
2. Hepatitis B (CDC Guides); www.cdc.gov/ncidod/diseases/hepatitis/b/Bserology.htm
3. National Institute of Environmental Health Sciences (NIH); www.niehs.nih.gov
4. NIEHS Reports on Carcinogens; www.niehs.nih.gov (Advanced Search)
5. CDC Post Exposure HIV Prophylaxis; www.cdc.gov/mmwr/preview/mmwrhtml/rr5409a1.htm

Environmental Medicine and Disaster Response

1. Calif. State Hazard Education and Information System (HESIS); www.dhs.ca.gov/ohb/HESIS
2. Environmental Toxicology: California Office of Environmental Health Hazard Assessment (OEHHA); www.oehha.ca.gov
3. First Responder Chemical Hotline; 1-800-424-8802
4. National Domestic Preparedness Office; http://www.virtualref.com/govagency/492.htm
5. DOT Hazardous Materials Safety; http://hazmat.dot.gov
6. Terrorism Self-Assessment; http://www.emsrb.state.mn.us/**terrorism**.asp
7. Chemical Hazard Response Information System (CHRIS): USCG; www.chrismanual.com
8. CDC Emergency Preparedness and Response; www.bt.cdc.gov
9. Required Reporting Information for spills (800) 424-8802; www.nrc.uscg.mil/nrchp.html
10. Managing Hazardous Materials Incidents. Volumes I-III; www.atsdr.cdc.gov/MHMI

Travel

1. CDC Travel; http://wwwn.cdc.gov/travel/default.aspx

Clinical Guidelines

1. Hydrogen Cyanide; www.emedicine.com/emerg/topic118.htm
2. Hydrogen Sulfide; www.emedicine.com/EMERG/topic258.htm
3. Other guidelines; www.emedicine.com